

PD990062-Sj-041000

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What is claimed isClaims

1. Method for coding a picture sequence, in which a picture in each case represents a detail of an object, in which case, when the picture sequence is displayed in a display window on a screen, this gives the viewer the impression that the object is moving horizontally in the display window, **characterized in that** the object picture is broken down into a number of segments (30) of equal size by means of vertical cuts, in that the pixel data of two respective adjacent segments (30) are combined, with a combined pixel being produced in each case from corresponding pixels in the segments to be combined, in such a way that the combined pixel is assigned a unique type (b, p, 1, 2), which corresponds to the distribution of the pixel values in the pair of corresponding pixels, and in that a defined number of combined pixels in each line of the object picture are in each case separately run-length coded, with the defined number of combined pixels corresponding to the number of pixels through which the object picture is moved per movement step in the horizontal direction.

2. Method according to Claim 1, wherein the size of the segments (30) corresponds to the size of the object details to be displayed.

3. Method according to Claim 1, wherein the two respective adjacent segments are shifted through two pixels in the vertical direction with respect to one another before they are combined.

4. Method according to Claim 1, wherein the two respective adjacent segments are shifted through one pixel in the vertical direction with respect to one another before they are combined.

35 5. Method according to Claim 1, wherein a combined picture piece is moved with respect to the previous and the next picture piece through the number of pixels through which the object is moved per picture in the horizontal direction.

6. Method according to Claim 1, wherein the pixels of the pictures can assume only two values, referred to in the following text as the "on" and "off" values.

5 7. Method according to Claim 1, wherein the following four different pixel types are provided:

- if the corresponding pixels both have the value "off", then the combined pixel value is allocated the type A;

A)
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10 - if the corresponding pixels both have the value "on", then the combined pixel value is allocated the type B;

15 - if the pixel in the first picture segment has the value "on" and the pixel in the second of the picture segments to be combined has the value "off", then the combined pixel value is allocated the type C;

20 - if the pixel in the first of the two picture segments to be combined has the value "off" and the pixel in the second of the two picture segments to be combined has the value "on", then the combined pixel value is allocated the type D.

25 8. Method according to Claim 1, wherein the picture segments to be combined are combined such that they only partially overlap, and missing pixels outside the overlapping area are assigned the value "off".

9. Sub-picture data unit for use in an electronic appliance, in particular a consumer electronics appliance, wherein the sub-picture data unit contains a picture sequence which has been coded 30 using a method according to Claim 1, having a data area (21) for the pixel values of the pictures in the picture sequence and having an instruction area (22) for displaying control instruction sequences (SP_DCSQ), characterized in that the display control instruction 35 sequences (SP_DCSQ) contain an instruction which sets the pointer for the start address of the run-length decoding in each case such that the run-length decoding then starts at different pixels in the object picture, in such a way that, in comparison to the previous run-

length decoding, the start of the run-length decoding is shifted through as many pixels to the right or left as the object picture is intended to be shifted in accordance with the desired movement, and in that the 5 display control instruction sequences contain an instruction which defines the way in which the combined pixels of a combined picture piece are to be evaluated in associated areas.

10. Sub-picture data units according to Claim 9, wherein the sub-picture data unit is designed for use 10 in a DVD appliance.

11. Sub-picture data unit according to Claim 10, wherein the display control instruction sequences (SP_DCSQ) contain the display control instruction 15 SET_DSPXA defined in the DVD standard in order to shift the run-length decoding pointer.

12. Sub-picture data unit according to Claim 10, wherein each of the pixel types A, B, C, D defined in Claim 6 is assigned in a mathematically unique manner 20 one of the pixel types (defined in the DVD Standard) "Background Pixel", "Pattern Pixel", "Emphasis-1 Pixel" and "Emphasis-2 Pixel".

13. Sub-picture data unit according to Claim 10, wherein the display control instruction SET_COLOR or 25 CHG_COLCON is used in a display control instruction sequence (SP_DCSQT) in order to define the way in which the combined pixels of a combined picture piece are to be evaluated in associated areas.

14. Data storage medium, in particular a DVD 30 disk, having a sub-picture data unit according to Claim 9.

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